WHAT IS CLAIMED IS:

1. A method of manufacturing a semiconductor device, comprising:

entirely implanting electrically inactive first impurity to one main surface of a semiconductor substrate; and

carrying out heat treatment by light with respect to the semiconductor substrate to which the first impurity is implanted.

2. The method according to claim 1, further comprising:

implanting electrically active second impurity having predetermined conduction type to the semiconductor substrate before the heat treatment is carried out; and

carrying out the heat treatment with respect to the semiconductor substrate to which the first and second impurities are implanted, and thereby, activating the second impurity.

3. The method according to claim 1, wherein the first impurity is ion-implanted to the surface layer of the semiconductor substrate at concentration of 1×10^{19} cm^{-3} or more.

4. The method according to claim 1, wherein at least one of group IV-B elements is sued as the first impurity.

5. The method according to claim 1, further

comprising:

pre-heating the semiconductor substrate to predetermined temperature of 600℃ or less before the heat treatment is carried out with respect thereto; and

carrying out the heat treatment with respect to the semiconductor substrate after pre-heating is made, said pre-heating being flash lamp annealing carried out under conditions that light emitting time is 100 msec or less and irradiation energy density is 100 J/cm^2 or less.

6. The method according to claim 4, wherein at least one of C, Si, Ge, Sn and Pb is used as the first impurity.

7. The method according to claim 5, further comprising:

carrying out said pre-heating to the semiconductor substrate using at least one of hot plate, heating lamp and laser beams.

8. The method according to claim 5, further comprising:

using any of hydrogen lamp, xenon lamp and halogen lamp as the heating lamp.

9. A method of manufacturing a semiconductor device, comprising:

providing a gate electrode having a gate insulating film on one main surface of a semiconductor substrate;

entirely implanting electrically inactive first impurity to one main surface of the semiconductor substrate provided with the gate electrode while implanting electrically active second impurity having predetermined conduction type to the semiconductor substrate to a region adjacent to the gate electrode of the semiconductor substrate using the gate electrode as a mask;

forming shallow source/drain diffusion regions having the predetermined conduction type, the shallow source/drain diffusion regions being formed in a manner that heating treatment using light is carried out the semiconductor substrate to which the first and second impurities are implanted, and thereby, the second impurity is activated;

providing a gate sidewall film around the gate electrode;

entirely implanting the first impurity to one main surface of the semiconductor substrate provided with the gate sidewall film while implanting the second impurity to the semiconductor substrate to a region adjacent to the gate sidewall film of the semiconductor substrate using the gate electrode and the gate sidewall film as a mask; and

forming deep source/drain diffusion regions having the predetermined conduction type, and continuing with the shallow source/drain diffusion regions, the deep

source/drain diffusion regions being formed in a manner that the heating treatment is carried out the semiconductor substrate to which the first and second impurities are implanted, and thereby, the second impurity is activated.

10. The method according to claim 9, wherein the first impurity is ion-implanted to the surface layer of the semiconductor substrate at concentration of 1×10^{19} cm^{-3} or more.

11. The method according to claim 9, wherein at least one of group IV-B elements is sued as the first impurity.

12. The method according to claim 9, further comprising:

pre-heating the semiconductor substrate to predetermined temperature of 600℃ or less before the heat treatment is carried out with respect thereto; and

carrying out the heat treatment with respect to the semiconductor substrate after pre-heating is made, said pre-heating being flash lamp annealing carried out under conditions that light emitting time is 100 msec or less and irradiation energy density is 100 J/cm^2 or less.

13. The method according to claim 11, wherein at least one of C, Si, Ge, Sn and Pb is used as the first impurity.

14. The method according to claim 12, further

comprising:

carrying out said pre-heating to the semiconductor substrate using at least one of hot plate, heating lamp and laser beams.

15. The method according to claim 14, further comprising:

using any of hydrogen lamp, xenon lamp and halogen lamp as the heating lamp.

16. A semiconductor device comprising:

a semiconductor substrate subjected to heat treatment using light after electrically inactive first impurity is entirely implanted.

17. The device according to claim 16, further comprising:

the semiconductor substrate to which electrically active second impurity having predetermined conduction type is implanted, and the semiconductor substrate being subjected to the heat treatment so that the second impurity is activated after the first and second impurities are implanted.

18. The device according to claim 16, wherein the first impurity is ion-implanted to the surface layer of the semiconductor substrate at concentration of 1×10^{19} cm^{-3} or more.

19. The device according to claim 16, wherein at least one of group IV-B elements is sued as the first impurity.

20. The device according to claim 19, wherein at least one of C, Si, Ge, Sn and Pb is used as the first impurity.

21. A semiconductor device comprising:

a semiconductor substrate formed with source/drain diffusion regions having predetermined conduction type, the semiconductor substrate being subjected to the following treatment such that electrically inactive first impurity is entirely implanted to the semiconductor substrate while electrically active second impurity having predetermined conduction type being implanted thereto, and the source/drain diffusion regions being formed in a manner that heating treatment using light is carried out the semiconductor substrate to which the first and second impurities are implanted, and thereby, the second impurity is activated; and

a gate electrode provided on the source/drain diffusion regions, and having a gate insulating film and a gate sidewall film.

22. The device according to claim 21, wherein the first impurity is ion-implanted to the surface layer of the semiconductor substrate at concentration of 1×10^{19} cm^{-3} or more.

23. The device according to claim 21 wherein at least one of group IV-B elements is sued as the first impurity.

24. The device according to claim 23, wherein at

least one of C, Si, Ge, Sn and Pb is used as the first impurity.